

IN THE CLAIMS

1. (Original) A method for controlling an output signal (A) of a voltage-current converting device, to which a reference voltage is fed and in which a differential voltage signal applied on the input side is converted into a differential current signal,
5 wherein
a reference voltage is set for the purpose of setting an output quiescent current (I_0);
10 an envelope of the signal applied on the input side is determined;
the reference voltage is altered in a manner dependent on the envelope;
the differential voltage signal is amplified by a factor;
15 the amplified differential voltage signal is converted into a current signal.
2. (Original) The method as claimed in Claim 1, wherein the reference voltage (U_{REF}) follows a voltage value of an envelope of the voltage signal applied on the input side, so that the voltage-current converting device is in an A operating mode.
20
3. (Original) The method as claimed in Claim 1, wherein the reference voltage (U_{REF}) is set such that the voltage-current converting device is in a B operating mode or in an AB operating mode.
25

4. (Original) A voltage-current converting device, comprising:
a voltage input having a first terminal (I) and a second terminal (IX);
5 a current output (A) having a first and a second terminal;
a first transistor (T1) connected to the first terminal of the current output, and a second transistor (T2) connected to the second terminal of the current output;
an operational amplifier having a first input (+), which is
10 coupled to the first terminal (I), having a second input (-), which is coupled to the second terminal (IX), having a first output (+), which is coupled to a base of the second transistor (T2), and having a second output (-), which is coupled to a base of the first transistor (T1), the operational amplifier (OP)
15 having a reference input and it being possible to set a quiescent current at the current output (A) by means of a voltage at the reference input;
featuring a setting device (DE), which is coupled to the reference input for feeding in a regulating voltage and can be used to determine
20 an envelope of an amplitude-modulated signal at the input (I, IX).

5. (Original) The voltage-current converter device as claimed in Claim 4, wherein the device has a level detector.

25

6. (Canceled)

7. (Canceled)

30 8. (Canceled)

9. (New) The voltage-current converting device of Claim 4, wherein a regulatable voltage source is provided, the output of which is connected to the reference input of the operational amplifier (OP) and which comprises a regulating input connected to the setting device (DE).

5

10. (New) The voltage-current converting device of Claim 5, wherein a regulatable voltage source is provided, the output of which is connected to the reference input of the operational amplifier (OP) and which comprises a regulating input connected to the setting device (DE).

10

11. (New) The voltage-current converting device of Claim 4, wherein the transistors (T1, T2) of the voltage-current converting device can be operated in an A, B or AB operating mode by means of the quiescent current (I_0) that can be set by the operational amplifier (OP).

15

12. (New) The voltage-current converting device of Claim 5, wherein the transistors (T1, T2) of the voltage-current converting device can be operated in an A, B or AB operating mode by means of the quiescent current (I_0) that can be set by the operational amplifier (OP).

20

13. (New) The voltage-current converting device of Claim 9, wherein the transistors (T1, T2) of the voltage-current converting device can be operated in an A, B or AB operating mode by means of the quiescent current (I_0) that can be set by the operational amplifier (OP).

25

14. (New) The voltage-current converting device of Claim 10, wherein the transistors (T1, T2) of the voltage-current converting device can be operated in an A, B or AB operating mode by means of the quiescent current (I_0) that can be set by the operational amplifier (OP).

30

15. (New) The voltage-current converting device of Claim 4, wherein
a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
5 the emitter of the second transistor (T2).

16. (New) The voltage-current converting device of Claim 5, wherein
a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
10 is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).

17. (New) The voltage-current converting device of Claim 9, wherein
a first load (R_{FB1}) is connected between the first input of the operational
15 amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).

18. (New) The voltage-current converting device of Claim 10, wherein
20 a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).

25 19. (New) The voltage-current converting device of Claim 11, wherein
a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).

30

20. (New) The voltage-current converting device of Claim 12, wherein
a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
5 the emitter of the second transistor (T2).

21. (New) The voltage-current converting device of Claim 13, wherein
a first load (R_{FB1}) is connected between the first input of the operational
amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
10 is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).

22. (New) The voltage-current converting device of Claim 14, wherein
a first load (R_{FB1}) is connected between the first input of the operational
15 amplifier (OP) and the emitter of the first transistor (T1) and a first load (R_{FB2})
is connected between the second input of the operational amplifier (OP) and
the emitter of the second transistor (T2).